CLAIMS

1. System for the infusion of pharmacological solutions comprising containing means (3) suitable for containing a pharmacological solution, pumping means (3) for generating a flow of said pharmacological solution from said containing means (3), characterised in that it furthermore comprises adjusting means (13) to vary said flow and command and control means (19) operationally associated with said adjusting means (13).

2. System according to claim 1, wherein said adjusting means comprises valve means (13).

3. System according to claim 2, wherein said valve means (13) is of the normally closed type.

4. System according to claim 2, or 3, wherein said valve means comprises at least one solenoid valve (13).

5. System according to claim 4, wherein said solenoid valve (13) comprises a solenoid arranged outside the valve part wherein the flow of said pharmacological solution transits.

6. System according to any one of claims 2 to 5, wherein said command and control means (19) comprises microprocessor means operationally connected to said valve means (13).

7. System according to any one of claims 2 to 6, wherein said command and control means (19) commands a pulsed actuation of said valve means (13), said flow being determined by the number of actuations of the valve means (13) in the time unit.

8. System according to any preceding claim, wherein said containing means and said pumping means comprises an elastomeric container (3) wherein said pharmacological solution is inserted.

9. System according to claim 8, wherein said elastomeric container (3) is supported on support means (4) associated with containing and protection means (2).

10. System according to claim 9, wherein said containing and protection means (2) is made of transparent material and is equipped on its outside surface with a graduated scale (5)

11. System according to claim 9, or 10, wherein said containing and protection means (2) comprises inlet means (9) connected to said elastomeric container (3) to introduce therein said pharmacological solution.

12. System according to claim 11, wherein said inlet means (9) is provided with a check valve.

13. System according to claim 11, or 12, wherein said inlet means (9) is associated with connecting means (11) suitable for enabling the coupling of said inlet means (9) with introducing means, to introduce said pharmacological solution into said inlet means (9).

14. System according to any one of claims 9 to 12, wherein said containing and protection means (2) furthermore comprises outlet means (10) connected to said elastomeric container (3), through which the pharmacological solution introduced into the elastomeric container (3) can flow out thereof.

15. System according to claim 14, wherein said outlet means (10) is suitable for being connected to an end of fitting means (12), the opposite end of which is connected to said valve means (13).

16. System according to any one of claims 8 to 15, wherein said command and control means (19) is operationally associated with a plurality of solenoid valves (13), each one of which is associated with a different elastomeric container (3).

17. System according to any preceding claim, wherein said command and control means (19) comprises interface means for operationally connecting command and control means (19) with data processing means.

18. System according to any preceding claim, wherein said command and control means (19) comprises reading means suitable for receiving a data recording support and for reading data stored thereupon.

19. System according to claim 18, wherein said data recording support is a data recording support of the smart-card type.

20. System according to any preceding claim, wherein said command and control means (19) is provided with electric supply means (18).

21. System according to claim 20, wherein said electric supply means is battery means (18).

22. System according to claim 21, wherein said battery means (18) is of the rechargeable or replaceable type.

23. Method for the infusion of a pharmacological solution in a patient, comprising generating a flow of said pharmacological solution from a container containing said pharmacological solution, sending said flow to catheter means insertable in the body of said patient, adjusting said flow by adjusting means (13) actuated by command and control means (19), characterised in that it furthermore comprises programming said flow and infusion times by programming means operationally connected to said command and control means (19).

24. Method according to claim 23, wherein said programming means comprises data processing means.

25. Method according to claim 24, wherein said data processing means comprises microprocessor means which may be connected to said command and control means (19).

26. Method according to claim 23, wherein said data processing means comprises microprocessor means being part of said command and control means (19).

27. Method according to claim 26, wherein said programming means comprises reading means suitable for reading data stored on a data-storage support, said reading means being operationally associated with said command and control means (19).

28. Method according to any one of claims 23 to 27, characterised in that it comprises the following steps:
- storing on a data-processing system or on a data-storage support definition parameters defining a protocol of infusion of said pharmacological solution;
- calibrating said adjusting means (13);

- storing definition parameters of an infusion curve for said infusion protocol and calculating the profile of said curve;
- storing parameters relating to the infusion cycles provided for by said infusion protocol.

29. Method according to claim 28, further comprising ascertaining that the quantity of pharmacological solution delivered on the basis of said infusion curve corresponds to the quantity provided for by said infusion protocol.

30. Method according to claim 28 or 29, further comprising ascertaining that the quantity of pharmacological solution infused in each of said infusion cycles does not deviate from a theoretical quantity provided for by said protocol by a quantity greater than a preset quantity.

31. Method according to claim 30, wherein said definition parameters comprise at least one protocol identifier, the type of solution to be infused, and the total volume of solution to be infused.

32. Method according to any one of claims 28 to 31, wherein said calibrating comprises measuring the quantity of solution delivered by said adjusting means (13) for each opening interval of said adjusting means (13) during an infusion cycle and ascertaining that the difference between said quantity and a preset quantity does not exceed a preset value.

33. Method according to any one of claims 28 to 32, wherein said definition parameters of an infusion curve comprise: duration of the infusion, volume of pharmacological solution to be infused, number of repetitions of the infusion curve, shape of the infusion curve.

34. Method according to any one of claims 28 to 33, furthermore comprising customising said infusion curve by modifying it on the basis of specific patient parameters.

35. Method according to any one of claims 28 to 34, wherein said parameters relating to infusion cycles according to said protocol comprise: the type of infusion curve, or curves provided for by said protocol for said infusion cycle and the type of infusion cycle to be conducted.

36. Method according to claim 35, wherein said infusion cycle may be of the automatic startup or startup at preset times type.

37. Method according to any one of claims 25 to 36, wherein said data-storage support is a data-storage support of a personal computer.